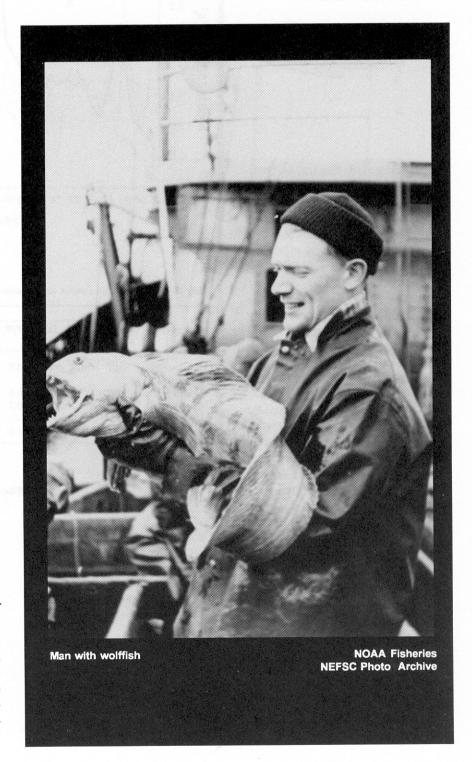
Atlantic Wolffish

by J. Idoine

The Atlantic wolffish or catfish, Anarhichas lupus, is a cold-water species of relatively minor importance in Gulf of Maine fisheries. Research vessel surveys indicate that populations on Georges Bank and in the western Gulf of Maine are discrete from wolffish in the Browns Bank -Scotian Shelfarea. West of the Scotian Shelf, abundance appears to be highest in the southwestern portion of the Gulf of Maine from Jeffreys Ledge to the Great South Channel at depths of 80 to 120 m (45 to 65 fathoms). Wolffish are sedentary and rather solitary in habit, and populations tend to be localized. Little is known about the biology of this species. Individuals may attain lengths of 150 cm (59 in.) and weights of 18 kg (40 lb). They prey heavily on shellfish.

Wolffish have been taken primarily as bycatch in the otter trawl fishery, although the species may also be an intended component in some mixed fishery situations. Recreational catches are insignificant. The species is unmanaged.

Since 1970, the U.S. nominal commercial catch has been about evenly divided between Georges Bank and the Gulf of Maine. In the last two decades, U.S. vessels have taken more than 85 percent of the total Georges Bank-Gulf of Maine catch; the remainder was taken by Canadian fishermen. Total Georges Bank-Gulf of Maine landings increased from 200 mt in 1970 to approximately 1,200 mt in 1984 and have since declined sharply to an average of 500 mt since 1990. Landings in 1996, 400 mt, are the lowest since the mid-1970s. Canadian landings have been insignificant in recent years.



"The decline in landings and in NEFSC trawl survey indices since the mid- 1980s indicate that biomass has been substantially reduced. This stock is clearly overexploited and depleted."



After fluctuating considerably from 1968 to 1985, the NEFSC spring bottom trawl survey biomass index has shown a consistent downward trend; the 1997 index value, 0.13 kg per tow, was the lowest in the time series. The 1990-1996 average (0.32 kg per tow) is approximately 20% of the average for previous years (1.41 kg per tow).

The decline in landings and in NEFSC trawl survey indices since the mid 1980s indicate that biomass has been substantially reduced. This stock is clearly overexploited and depleted.

For further information

Bigelow, H.B., and W.C. Schroeder. 1953. Fishes of the Gulf of Maine. Fish. Bull., U.S. Fish. Wildl. Serv. 74(53).

Nelson, G.A., and M.R. Ross. 1992. Distribution, growth and food habits of the Atlantic wolffish (*Anarhichas lupus*) from the Gulf of Maine-Georges Bank region. *J. Northw. Atl. Fish. Sci.* 13:53-61.

Gulf of Maine - Georges Bank Atlantic Wolffish

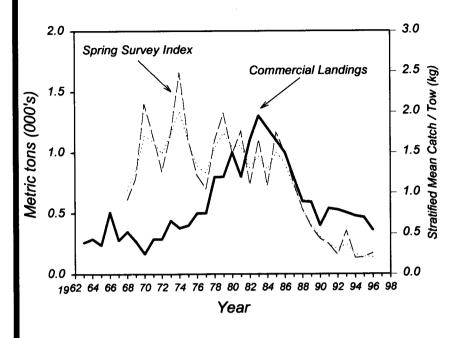


Table 19.1 Recreational catches and commercial landings (thousand metric tons)

| Category | Year | | | | | | | | | | |
|---------------------------------|--------------------|------|------|------|------|------|-------|-------|-------|-------|-------|
| | 1977-86 Average | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| U.S. recreational Commercial | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| United States | 1.0 | 0.7 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 |
| Canada | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Other | - | - | - | - | - | - | - | - | - | - | - |
| Total nominal ca | tch 1.1 | 0.8 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 |

Summary Status

<1.000 mt Long-term potential catch Unknown SSB for long-term potential catch Insignificant Importance of recreational fishery None Management Overexploited Status of exploitation Unknown Age at 50% maturity Size at 50% maturity Unknown Index Assessment level N/A Overfishing definition Fishing mortality rate corresponding N/A to overfishing definition

M = Unknown $F_{0.1} = Unknown$ $F_{max} = Unknown$ $F_{1996} = Unknown$